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CLAIMS:

1. A correction coefficient calculating method for X-ray CT systems,
comprising the steps of:

5 positioning a phantom, which has an oblong section, in a scan field between an
X-ray tube and an X-ray detector, and scanning the phantom from plural directions so
as to acquire a plurality of views; and

calculating a correction coefficient, which is used to correct projection
information to be acquired from a subject, using the results of the scan.

10 2. A correction coefficient calculating method for X-ray CT systems of Claim
1, wherein the final correction coefficient is calculated as an average between the first
correction coefficient and the second correction coefficient.

15 3. A beam-hardening post-processing method for X-ray CT systems,
comprising the steps of:
positioning a phantom, which has an oblong section, in a scan field between an
X-ray tube and an X-ray detector, scanning the phantom from one or plural directions
so as to acquire a plurality of views, and producing one sinogram using first
projection information;

20 correcting the first projection information in terms of the beam-hardening
effect so as to produce second projection information;

fitting a first function to the second projection information so as to produce
third projection information;

25 fitting a second function to the third projection information values, the third
projection information values being provided as functions having as independent

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variables the second projection information values that are sampled in relation to all the views and each of the channels of said X-ray detector constituting the second projection information; and

correcting projection information acquired from a subject, who is positioned in
5 the scan field, using a correction function obtained as the second function.

4. An X-ray CT system, in which projection information acquired from a subject is corrected using correction coefficients calculated according to the beam-hardening post-processing method of Claim 3.

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